

**IN THE U.S. PATENT AND TRADEMARK OFFICE BEFORE  
THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of	Appeal No.
Sumit ROY et al.	Conf. 6741
Application No. 10/522,815	Group 3731
Filed October 21, 2005	Examiner Kathleen Sonnett
METHOD AND DEVICE FOR INTERCONNECTION OF TWO TUBULAR ORGANS	

**REPLY BRIEF**

MAY IT PLEASE YOUR HONORS:

This is a reply to the Examiner's Answer mailed October  
14, 2009.

**STATUS OF CLAIMS**

Claims 20-30 and 33-35 are pending in the application.  
Claims 1-19, 31 and 32 have been canceled. Claims 20-30 and 33-35  
have been finally rejected, from which this appeal is taken.

**GROUND S OF REJECTION TO BE REVIEWED ON APPEAL**

The first ground for review on appeal is whether claims 20-30, 33 and 34 lack written description sufficient to support a rejection under 35 USC §112, first paragraph.

The second ground for review on appeal is whether claims 20-25, 30 and 33-35 are sufficiently anticipated by BLOOMER (U.S. Patent 2,537,183) to support a rejection under 35 USC §102(b).

The third ground for review on appeal is whether claim 26 is sufficiently unpatentable over BLOOMER in view of HART (U.S. Patent 1,339,620) to support a rejection under 35 USC §103(a).

The fourth ground for review on appeal is whether claim 27 is sufficiently unpatentable over BLOOMER in view of DEFAUW (U.S. Patent 3,358,357) to support a rejection under 35 USC §103(a).

The fifth ground for review on appeal is whether claim 28 is sufficiently unpatentable over BLOOMER in view of HAURY (U.S. Patent 2,211,776) to support a rejection under 35 USC §103(a).

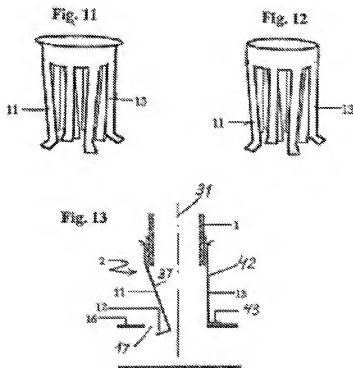
The sixth ground for review on appeal is whether claim 29 is sufficiently unpatentable over BLOOMER in view of FROST (U.S. Patent 3,228,713) to support a rejection under 35 USC §103(a).

**ARGUMENT**

**Rejection under 35 USC §112, First Paragraph**

At page 3 the Examiner's Answer asserts that claim 20 should be rejected under 35 USC §112, first paragraph because there is "no disclosure in the specification or figures to support a limitation of fingers made of material with a uniform thickness," and "without this disclosure it is unclear whether or not all of the fingers are uniform in thickness."

As can be seen, the application's drawing figures clearly show a uniform thickness of the main portion (11) and the gripping portion (12), by way of example, in Figures 11-13, which are reproduced below.



Although the Examiner acknowledged that the cross section shows the finger is relatively the same thickness, the position of the Examiner is that the cross section does not show each of the fingers could not be thicker at locations circumferentially offset of the place where the cross section was taken.

However, the relevance of the putative uncertainty is moot because providing fingers differing in thickness will not affect the way that the invention works. Also, an embodiment of the invention with this property would simply reflect an alteration in shape or configuration. Therefore, according to United States case law, the specification need not describe the claimed invention in *ipsis verbis* to comply with the written description requirement. *In re Edwards*, 568 F.2d 1349, 196 USPQ 465 (CCPA 1978). The test is whether the disclosure reasonably conveys to one of ordinary skill that applicant had possession of the claimed subject matter. *In re Kaslow*, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983).

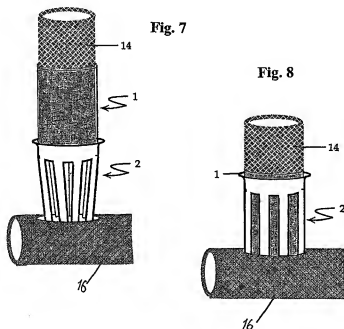
As a result, the claims are in full compliance with the written description requirement.

This rejection under 35 USC §112, first paragraph should accordingly be withdrawn.

**Rejections based on BLOOMER**

Before turning to the points of argument in the Examiner's Answer, it would be instructive to review the present invention and BLOOMER.

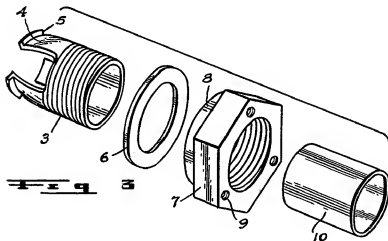
The present invention pertains to a connecting device having a first element (1) and a second element (2) that is shown, by way of example, in Figures 7 and 8 of the application, reproduced below.



The second element is provided with at least two elongated first fingers which are arranged at intervals along the circumference of the first passage, and the fingers are of uniform radial thickness. Each of the fingers is formed from a main portion extending from a second front portion and in the direction of a second longitudinal axis, and the main portion is continuous with a gripping part, wherein the gripping part is

directed away from the second longitudinal axis in an undeformed condition of said second element, such that introduction of the first element into the second element displaces the main portions of the fingers radially outwards. See independent claims 20 and 35.

BLOOMER pertains to a coupling connection having a third element, including a threaded tubing having one end formed with an inwardly curving reduced internal diameter. See claim 1 and Figure 3 of BLOOMER, reproduced below.



BLOOMER includes a third element, a nut (7), receivable on the threads of the first element (claim 1, column 3, line 48, claim 2, column 3, line 57, claim 3, column 4, line 10, claim 4, column 4, line 23, claim 5, column 4, line 39). In contrast, the present invention includes only two elements as clearly stated in claim 1.

The Response to Arguments at page 8 of the Examiner's asserts that, with an opening end transition phrases, BLOOMER

discloses all of the claimed structure of the present invention recited in the claims.

However, the Office does not dispute that the device of BLOOMER includes two more **functional** features, threading on the second element and a third element (nut 7 of BLOOMER), than those claimed by Applicant. It has been already clarified in *In re Edge*, 359 F.2d 896, 149 USPQ 556 (CCPA 1966), that omission of an element and retention of its function is an indicia of patentability.

In other words, the contention that BLOOMER anticipated the Appellant's invention is without legal merit because the present invention renders the essential features of BLOOMER redundant.

Also, the Examiner's Answer at page 8 asserts that there are "no limitations in the claim that exclude the additional features", which could not find support neither in 35 U.S.C. §102 or the case law cited in the Examiner's Answer (e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004); *Genentech, Inc. v. Chiroo Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997).

It is clear that the Appellant's invention does not suffer from the structural limitations of BLOOMER and yet serves a useful function makes it patentable because it satisfies the statutory requirements of being novel and non-obvious.



Arguing that the application should be rejected not because it actually anticipates a patent, but has the potential to do so as "there are no limitations ... to exclude the additional features" of prior art represents a misinterpretation of 35 USC §102.

Moreover, in the Response to Arguments at page 9 of the Examiner's answer, the interpretation that the limitation of the second finger "being arranged to abut against the outside of the second organ" as representative of "functional language" is incorrect.

To perform the function recited in the relevant claim, the second finger is both spatially and dimensionally different from the first finger, and is thus a separate structural entity in its own right. For the finger (4) of BLOOMER which serves as a surrogate for the second finger, one needs to create a new feature, that not only BLOOMER did not anticipate, but also would not have been obvious to one skilled in the art, as has been conceded.

Moreover, even if one assumes that the language is functional language, this language still has probative value.

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in

and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. *Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1117-20, 72 USPQ2d 1001, 1006-08 (Fed. Cir. 2004).

Further, as would be clear to anyone familiar with the art, BLOOMER actually teaches away from such a modification, because the second finger or fingers would defeat the entire purpose of gasket (6) and flange (8), and make the coupling connection leak prone.

Even if one agrees with the Examiner that the second finger or fingers simply represent first finger or fingers that have been spatially redistributed, BLOOMER does not teach or infer to the present invention recited in the claims because the mere fact that one skilled in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness.

That is, the prior art must provide a motivation or reason for one skilled in the art, without the benefit of

Appellant's specification, to make the necessary changes in the reference device." *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Ed. Pat. App. & Inter. 1984).

Furthermore, the Response to Arguments at page 11 of the Examiner's answer asserts that one skilled in the art would have recognized that fluid tight connectors would have been reasonably pertinent to the particular problem of forming a good connection between two organs since these connectors are often used to form a fluid tight connection between two tubular devices.

However, the contention that BLOOMER's device can be used to join tubular organs such as blood vessels is an exercise in wishful thinking based on a profound misunderstanding of biological principles. Contrary to what has been asserted, the structural characteristics of tubular organs such as blood vessels render use of nut (7) and gasket (6) such as those include, fortunately, wishful thinking fortunately does not guide medical practice.

Hence BLOOMER's device has been ignored by practitioners skilled in the medical field, despite its invention over a half century ago, while the Appellant's invention has already been reduced to practice in the laboratory.

**Rejections over BLOOMER, HART, FROST, DEFAUW and HAURY**

HAURY describes perforations (15) that are designed to accommodate buttons (16) that are formed when a resilient tube

(4) is "squeezed into the form of buttons." The Appellant's invention incorporates only perforations. Thus a *prima facie* case for equivalence between the perforations (15) of HAURY's patent and the perforations of the present invention does not hold up under scrutiny, because to establish *prima facie* obviousness, all the claim limitations must be taught or suggested in the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1984). In this case buttons cannot be construed as perforations even by inference or implicit disclosure. See *In re Praeda*, 401 F.2d 826, 159 USPQ 344 (CCPA 1986).

Furthermore the Examiner's contention that these features would have been integrated into BLOOMER's invention by a one or skill in the art is illogical, because the hooking member (3), if the feature that corresponds to the resilient tube (4) were indeed "squeezed" to deform its structure as taught by HAURY, threading the clamping nut (7) on to it would be rendered impossible.

The 35 U.S.C. §103 rejection based on the teachings of FROST is also flawed for the reasons described in the previous. If the "outer edge" of the hooking member (3) of BLOOMER's invention was flared as described by FROST, threading the clamping nut (7) on to it would be rendered impossible.

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from

acknowledge of BLOOMER, HART, FROST, DEFAUW and HAURY. A *prima facie* case of unpatentability has thus not been made.

**Conclusion**

It is believed that the foregoing discussion underscores the impropriety of the rejections on appeal and supports the showing made in Appellant's main brief that those rejections should be reversed. Such action is accordingly respectfully requested.

Respectfully submitted,

YOUNG & THOMPSON

/Robert E. Goozner/  
Robert E. Goozner, Reg. No. 42,593  
Attorney for Appellants  
209 Madison Street, Suite 500  
Alexandria, VA 22314  
Telephone (703) 521-2297  
Telefax (703) 685-0573

REG/HC/fb  
December 14, 2009